

CLAIMS

We claim:

1. A method of controlling leafhopper or treehopper pest, comprising applying an effective amount of a juvenile hormone analog to the pest or a pest-inhabited locus.

2. The method of claim 1, wherein the leafhopper is a member of the order Hemiptera, family Cicadellidae, subfamily Cicadellinae, and tribe Proconini.

3. The method of claim 1, wherein the leafhopper pest is a sharpshooter.

4. The method of claim 1, wherein the leafhopper pest is a sharpshooter selected from the group consisting of *Homalodisca coagulata*, *Homalodisca insolita*, *Paraulacizes irrorata*, *Cuerna costalis*, and *Oncometopia nigricans*.

5. The method of claim 1, wherein the leafhopper pest is one or more selected from the group consisting of glassy-winged sharpshooter (*Homalodisca coagulata*), grape leafhopper (*Erythroneura spp.*), blue-green sharpshooter (*Graphocephala atropunctata*), potato leafhopper (*Empoasca fabae*), beet leafhopper (*Circulifer tenellus*), white apple leafhopper (*Typhlocyba pomaria*), rose leafhopper (*Edwardsiana rosae*), mango leafhopper (*Idioscopus nitidulus* and *I. clypealis*), three-banded leafhopper (*Erythroneura tricincta*), variegated leafhopper (*Sophonia rufofascia*), two-spotted leafhopper (*Sophonia rufofascia*), aster or six-spotted leafhopper (*Macrosteles quadrilineatus*), redheaded sharpshooter (*Carneocephala fulgida*), green sharpshooter (*Draeculacephala minerva*), willow sharpshooter (*G. confluens*), and smoketree sharpshooter (*Phera lacerta*).

6. The method of claim 1, wherein the pest is a leafhopper selected from the group consisting of *Carneocephala spp.*, *Draeculacephala spp.*, *Homalodisca spp.*, *Hortensia spp.*, *Oncometopia spp.*, *Paraulacizes spp.*, *Phera spp.*, *Plesiommata spp.*, *Plummerella spp.*, *Sibovia spp.*, and *Tylozygus spp.*

7. The method of claim 1, wherein the pest is a leafhopper selected from the group consisting of *Diloboperus costalimai*, *Oncometopia facialis*, *Homalodisca ignorata*, *Acrogonia virescens*, *Molomea cincta*, and *Teletusa limpida*.

8. The method of claim 1, wherein the pest is a leafhopper selected from the group consisting of *Alebra albostriella*, *Edwardsiana rosae*, *Graphocephala* spp., *Oncometopia* spp., *Aulacizes irrorata*, *G. coccinea*, *G. versuta*, *O. undata*, *Erythroneura* spp., and *Typhlocybia* spp.

9. The method of claim 1, wherein the pest is a treehopper selected from the group consisting of *Enchenopa binotata*, *Ophiderma* spp. (such as *Ophiderma flavicephala*, *Ophiderma pubescens*, *Ophiderma evelyna*, and *Ophiderma flava*), *Cyrtolobus* spp. (such as *Cyrtolobus fenestratus*), *Archasia* spp. (such as *Archasia belfragei*), *Telanoma* spp. (such as *Telanoma ampelopsosis* and *Telanoma decorate*), *Glossonotus* spp. (such as *Glossonotus acuminatus*), and *Smilia camelus*.

10. The method of claim 1, wherein the leafhopper pest is a glassy-winged sharpshooter (*Homalodisca coagulata*).

11. The method of any of claims 1 to 10, wherein the juvenile hormone analog is one or more selected from the group consisting of epofenonane, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, and triprene.

12. The method of any of claims 1 to 10, wherein the juvenile hormone analog is one or more selected from the group consisting of methoprene, kinoprene, and hydroprene.

13. The method of any of claims 1 to 10, wherein the juvenile hormone analog comprises methoprene.

14. The method of any of claims 1 to 13, wherein said method comprises applying the juvenile hormone analog to a vineyard.

15. The method of any claims 1 to 13, wherein the pest is on a grapevine or the pest-inhabited locus is a grapevine.

16. The method of any of claims 1 to 15, further comprising verifying the presence of leafhopper or treehopper pests at the pest-inhabited locus, wherein said verifying is carried out before, during, and/or after said applying.

17. The method of any of claims 1 to 16, further comprising applying at least one additional agent to the pest or pest-inhabited locus, wherein the agent is selected from the group consisting of an insecticide, bactericide, herbicide, and fungicide.

18. The method of any of claims 1 to 16, further comprising applying at least one additional agent to the pest or pest-inhabited locus, wherein the agent is effective at controlling the pest.

19. The method of claim 18, wherein the additional agent is not a juvenile hormone analog.

20. The method of claim 18 or 19, wherein the additional agent comprises a hydrophobic or hydrophilic particle film.

21. The method of claim 18 or 19, wherein the additional agent comprises kaolin.

22. A composition comprising a juvenile hormone analog and at least one additional agent that is effective at controlling a leafhopper or treehopper pest.

23. The composition of claim 22, wherein said juvenile hormone analog is one or more selected from the group consisting of epofenonane, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, and triprene.

24. The composition of claim 22, wherein said juvenile hormone analog comprises methoprene.

25. The composition of claim 22, wherein said additional agent is not a juvenile hormone analog.

26. The composition of claim 22, wherein said additional agent comprises a hydrophilic or hydrophobic particle film.

27. The composition of claim 26, wherein said additional agent comprises kaolin.